

APRIL/MAY 2025

**23PSMB25 — ORGANIC FARMING AND  
BIOFERTILIZER TECHNOLOGY (SEC II)**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL the questions.

1. Define organic farming.
2. What is the significance of integrated pest management?
3. What is ecological balance.
4. What is land degradation.
5. Define green manure.
6. List any two advantages of biofertilizers.
7. What is Bio fertilizer.
8. What is the role of phosphate-solubilizing bacteria?
9. What is sterilization?
10. Define fermentation.





SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Discuss the differences between organic and conventional farming.

Or

- (b) Explain the importance of biological nutrient management in organic farming.

12. (a) What are the factors affecting ecological balance in farming systems?

Or

- (b) Discuss the components and goals of an integrated farming system.

13. (a) Describe the structure and role of Rhizobium as a bacterial biofertilizer.

Or

- (b) Explain the characteristics and advantages of Azospirillum.

14. (a) Describe the role of cyanobacterial biofertilizers in nitrogen fixation.

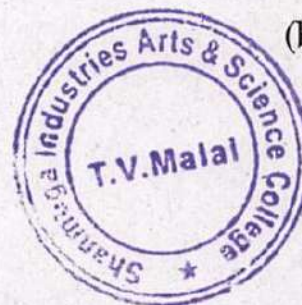
Or

- (b) What are the mechanisms involved in potassium solubilization?

15. (a) Explain the steps involved in the mass production of carrier-based biofertilizers.

Or

- (b) Discuss the quality control measures for biofertilizers based on FCO specifications.



SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the types and advantages of different organic manures used in organic farming.

17. Discuss the various schemes and certifications available for promoting organic farming in India.

18. Explain the scope and importance of biofertilizer.

19. Write an essay on symbiotic nitrogen fixation.

20. Discuss the packaging, storage, and marketing considerations for biofertilizers to maintain quality and shelf life.